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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/664,403	09/18/2000	Ross H. Cornell	05997.0019-00	4008

22852 7590 04/25/2007  
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EXAMINER

PATEL, JAGDISH

ART UNIT PAPER NUMBER

3693

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/25/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/664,403	<b>Applicant(s)</b> CORNELL, ROSS H.	
	<b>Examiner</b> JAGDISH PATEL	<b>Art Unit</b> 3693	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 7-10, 27-30, 45-48, 71-78 and 85-88 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-10, 27-30, 45-48, 71-78, 85-88 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This communication is in response to submitted amendment filed 1/10/07. The supplemental amendment was filed after telephone interview with Ex. Alpert during the first week of January 2007.

#### *Change of Examiner Assignment*

2. The applicant should note that the application has been assigned to Examiner Jagdish Patel, AU 3693.

#### *Status of the Application*

3. Claims 7-10, 27-30, 45-48, 71-78, 85-88 are currently pending.

#### *Response to Arguments*

4. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejections.

#### *Claim Rejections - 35 USC § 101*

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 71-78 and 85-88 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a non-statutory subject matter because *the instant claims do not meet this standard of a statutory definition of a process claim.*

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Claims 71-78 recites directing a first, a second, a third portion of interest cash flows to respective securities and directing a variable cash flow from the interest rate derivative to the float-rate security. The claims fail to produce useful, concrete and tangible result since there is the portions of the interest cash flows are not stated with any defined, specific (and therefore "concrete") standard. The claims furthermore, fail to produce any result in conjunction with and a result of the directing steps of the claim. In other words, the process recited in the claim(s) do not meet the statutory definition of a process. The Court has held that the "transformation and reduction of an article to a different state or thing" is the clue to the patentability of a process claim, that does not include particular machines. *State Street Bank & Trust Co. v. Signature Financial Group*, 149 F.3d 1368 (Fed. Cir. Jul. 23, 1998).

Therefore, it is concluded that the subject claims are not directed to a statutory subject matter under 35 USC 101 since (i) they are not patentable as process claims and (ii) they do not produce useful concrete, tangible and tangible result.

Claims 85-88 recite a system which recite underlying process steps of receiving a principal cash flow, receiving a first interest cash flow, receiving a second interest cash flow from the mortgage assets and receiving the variable derivative cash flow from the interest rate derivative. Applying the analysis presented for claims 71-78, claims 85-88 do not meet the criteria set forth for a statutory process claim.

### ***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claims 7-10, 27-30 and 45-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

NOTE: only independent claims have been discussed. The applicant should review the dependent claims in view of the amendment of the independent claims warranted by the issues raised in this action.

Claims 45-48 are discussed first.

Claim 45 recites elements of a system for creating investment securities, which are backed by mortgage pool components.

In a system claim one or more elements are defined with associated functionality. Only the functions associated with each element is given patentable weight. However, those limitations which are not functionally related to the element of the system (or apparatus) are not accorded any patentable weight. In the instant claims the phrase "to determine whether cash flows ..are sufficient to pay interest obligations for proposed securities that include...floating-rate class," merely state intended use of analyzing risk elements.." performed by the risk analysis module and only non-functionally related to the risk analysis and planning module. More specifically, the determination of the cash flow is recited as intended use of the analysis performed by the risk analysis and planning module.

The second function of the "risk analysis and planning module" is to generate a plurality of plans for structuring securities that include cash flows from selected components from the interest rate derivative components and mortgage pool components in combination that were

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determined to have sufficient cash flows to service the floating-rate class and a related inverse floating-rate class.

Since the “risk analysis and planning module” fails to positively recite the functionality of determining cash flows sufficiency as required the generating step, there is lack of positive antecedent basis for the limitation “cash flows from selected components from ...in combination that were determined have sufficient cash flows..” in the claim.

The examiner suggests the following revised language of the claim limitation:

A risk and planning module that analyzes risk elements of interest rate derivative components and mortgage pool components, determines whether cash flows from the interest rate derivative components and mortgage pool components are sufficient to pay interest obligations for proposed structured securities that include a floating-rate class and a related inverse floating-rate class.

The claim further recites the functionality associated with the aforementioned risk and planning module, of generating a plurality of plans for structuring securities. However, generating plans for structuring securities is not necessarily indicative of the securities being structured and issued. Therefore, limitations generating a plurality plans and adopting a plan from among the plurality of plans which overcomes an artificial leverage limitation are indefinite because unless the limitation “plans” is more clearly specified in the context of the proposed securities in combinations it remains unclear how a plan overcomes an artificial leverage limitation.

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Method claim 7 recites process similar to system claim 45 and contain similar deficiencies. The examiner strongly suggests that the method claims be amended to parallel the correspond system claims.

In the present version of the claims the process recited in claim 7 as being performed by a processor which is adapted for the same is materially different from that performed in the corresponding system claim 45. As an example, the amended claim 7 recites “analyze interest-rate derivative component and mortgage pool components..” whereas claim 45 recites the corresponding limitation as “a risk analysis and planning module that analyzes risk elements of interest-rate derivative component and mortgage pool component”. Note the underlined portion distinguishes the two forms of claim. The applicant is requested to exercise care in drafting claims so the scope of the claims having different forms (such as claims 7 and 45) remains the same with the exception of the implements.

Claim 7 is indefinite because it recites system element as “one or more processor adapted to” which renders unclear whether the process steps performed in the claim are implemented on a single processor or multiple processors. If multiple processors are involved in the process how they are configured with respect to the process recited in the claim and how they interrelate in terms of their functionalities. Furthermore, even if assumed that a single processor is adapted to carryout all process steps recited in claim, it is unclear what structure and interfaces is being implemented so the stated functionality is enabled.

Claim 7 is also indefinite because certain critical limitations of the claim are only recited as merely “intended functions” as explained below.

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In analyzing step... “to determine whether cash flows ..are sufficient ..to pay interest obligations...” should read “..and determine whether cash flows ..are sufficient ..to pay interest obligations...”.

In the step “generate a plan to structure the securities..” should read “structure the proposed securities by generating a plan...” and “thereby overcoming an artificial leverage limitation” (which is recited as merely expected or desirable outcome) should read “..such that an artificial leverage limitation is overcome”.

The “validate the plan for securities” should read “validate the plan for structuring the proposed securities such that under a variety of prepayment scenarios, securities issued under the plan will receive sufficient cash flows from ..to pay interest obligations for the securities,”.

The step administer the securities issued under the validated plan lack positive antecedent basis for the limitation “the securities issued..” because the claim fails to recite a step of issuing the securities. The claim should recite a step such as:

“issuing the proposed securities under the validated plan,”. (see claim 45 for similar limitation).

Claim 27 is also indefinite because certain critical limitations of the claim are only recited as merely “intended functions” as explained below.

In analyzing step... “to determine whether cash flows ..are sufficient ..to pay interest obligations...” should read “..and determining whether cash flows ..are sufficient ..to pay interest obligations...”. (NOTE: the term “adequate” is subjective and more properly read “sufficient” as more precise term in the context of the payment).



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In “if the cash flows are adequate, strategically allocating”, the limitation “to create classes of investment securities” is recited as only intended function of the process step. It should read “and creating classes of investment securities including at least a floating rate class and an inverse floating-rate class...”.

The term “strategically allocating” is vague and indefinite. There is no criteria or standard specified in the claim that provide meaning to determine what is strategic allocation.

The claim fails to provide any context of the limitation “that overcome an artificial leverage limitation”. This term is not specified in context of the class of investment securities created in the claimed invention. One of ordinary skill in the art cannot relate the artificial leverage limitation to the set of securities. It is suggested that the applicant clearly and specifically recite the missing relationship.

### *Conclusion*

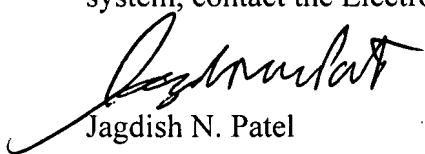
Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAGDISH PATEL whose telephone number is (571) 272-6748.

The examiner can normally be reached on 800AM-630PM Mon-Tue and Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **KRAMER JAMES A** can be reached on **(571)272-6783**. The fax phone number for the organization where this application or proceeding is assigned is 517-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jagdish N. Patel

(Primary Examiner, AU 3693)

4/22/07